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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,009	03/29/2001	R. Alan Whitehurst		8516

7590 02/08/2005  
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EXAMINER

SAADAT, CAMERON

ART UNIT PAPER NUMBER

3713

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,009

Applicant(s)

WHITEHURST ET AL.

Examiner

Cameron Saadat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 57-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 57-62, 64-68 and 70-75 is/are rejected.
- 7) ☒ Claim(s) 63 and 69 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/5/2004 has been entered. Claims 57-75 are pending in this application. Claims 1-56 are cancelled.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claims 57 is rejected under 35 U.S.C. 102(b) as anticipated by Boulton (USPN 4,985,697) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cook et al. (USPN 5,727,950; hereinafter Cook).

Regarding Claim 57, Boulton discloses a computer-based teaching and evaluation method for assessing a learner's preferred learning style and presenting to the learner instructional information organized into course material prepared in a plurality of instructional strategy formats and comprising the steps of:

- identifying a set of instructional information prepared in a plurality of instructional strategy formats (Col.20, line 34 – Col. 21, line 10);

- identifying initial weight values of *default*, *current*, and *alternate* to an instructional strategies (Col. 8, lines 3-6, 35-42);

- presenting evaluation instruments through a computer requesting a response from a student useful to measure competency relating to a topic taught using one of the instructional strategies; qualitatively assessing the student's mastery of concepts taught using instructional strategies used in the set of instructional information, the assessment performed using the student's responses to the evaluation instruments and further by relating the responses to the instructional strategies used to teach the tested concepts (Col. 8, lines 3-13, 58-64)

- adjusting the weight values of the instructional strategies - *default*, *current*, *alternate* (Col. 8, lines 3-6) using the qualitative assessment to favor instructional strategies showing greater mastery of instructional material by the student; in subsequent information presentations, increasing the use of those instructional strategies having a value indicating a greater likelihood of greater success of the student's instruction (Col. 4, lines 21-32).

It is noted that applicant provides the following definition for the term *weight*-

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The rating or weight determines the value as to the relative strength of that teaching approach as compared with the other approaches presented for that concept (Spec24, lines 17-20)

Accordingly, Boulton assigns at least two weight values of - current instructional strategy or alternate instructional strategy, in order to determine the relative strength of one strategy over another for adjusting instruction style (modality) according to a user's preferred learning style. Thus, applicant's claimed weight values do not distinguish over the weight values described in Boulton.

In the alternative, if not explicitly described it would have been obvious to implement *weight values* to the instructional strategies in view of Cook. Cook teaches an educational method for assessing a user's learning style (Col. 12, lines 20-23) wherein weight values are used to determine a next action with regards to providing agent instruction (Col. 39, 27-49). Thus, it would have been obvious to one of ordinary skill in the art to modify the values associated with the instructional strategies, as described in Boulton, by associating various instructional strategies with *weight* values, in order to process data based on student actions further processing a decision to determine what instructional materials to present.

**Claims 58, 61-62, 64-65, 68, 70-71, 74-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boulton (USPN 4,985,697) in view of Cook et al. (USPN 5,727,950; hereinafter Cook).**

Regarding claims 64 and 70, Boulton discloses all of the claimed limitations in accordance with claim 57, with the exception of explicitly disclosing the feature of presenting instructional information based on available bandwidth limitations. However, Cook discloses an educational system wherein the type of instruction presented is based partly by available bandwidth considerations (Col. 16, lines 17-25). Hence, in view of Cook, it would have been obvious to an artisan to modify presentation of instruction based on bandwidth limitations in order to enhance communications efficiency.

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Regarding claims 58, 65, and 71, Boulton discloses a method and system further including the feature of assigning a rating regarding the relative strength for a particular student of each presented instructional strategy associated with a concept (Col. 4, lines 21-32).

Regarding claims 61 and 74, Boulton discloses a method and system further comprising the feature of preparing an assignment for the student to perform (Col. 8, lines 58-64).

Regarding claims 62, 68, and 75, Boulton discloses a method and system further comprising the feature of transmitting instruction via telephone lines (Col. 10, lines 46-49). Boulton does not explicitly disclose a web-browser executing on a client computer. However, it is the examiner's position that the use of a web-browser is old and well known for providing a user interface for transmitting and receiving information over a communication network, such as the Internet. Therefore it would have been obvious to implement a web-browser, user interface for transmitting and receiving information over a communication network.

**Claims 59-60, 66-67, and 72-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boulton (USPN 4,985,697) in view of Cook et al. (USPN 5,727,950; hereinafter Cook) further in view of Ferrell (USPN 6,285,993; hereinafter Ferrell).**

Regarding claims 59-60, 66-67, and 72-73, the combination of Boulton and Cook discloses all of the claimed limitations with the exception of explicitly disclosing the feature of building a profile of a learning style of a student (as per claims 59, 66, and 72) and tracking the frequency of use of instructional strategies (as per claims 60, 67, and 73). However, Ferrell discloses a method of modeling individual learning styles by generating a student profile (Col. 3, lines 13-19) and tracking frequency of selection of instructional strategies (Col. 4, lines 15-22). Hence, in view of Ferrell, it would have been obvious to an artisan to modify the method of collecting data regarding instructional strategies by generating student profiles for tracking data in order to determine a student's optimal or preferred learning style.

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*Allowable Subject Matter*

Claims 63 and 69 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is an examiner's statement of reasons for allowance: Patentability is seen in, although not limited to the combination of all elements specifically claimed in combination with the feature of implementing a random pattern in the step of increasing strategies favoring the use of those instructional strategies having a weight indicating a greater likelihood of success on the student's instruction. The closest prior art of record does not teach or fairly suggest this feature in the combination.

*Response to Arguments*

Applicant's arguments with respect to claims 57-75 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Corder (USPN 5,692,906) – discloses a method of determining and adjusting presentation of instruction based on a student's optimal learning style.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cameron Saadat whose telephone number is (571) 272-4443. The examiner can normally be reached on M-F 9:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CS

  
XUAN M. THAI  
PRIMARY EXAMINER  
AU 3713